

*a1* sealed actuator, wherein the sealed actuator is surrounded with the sterile region.

23. The method of claim 22, further including providing a tank for containing a supply of pressurized aseptic product flowing to the valve.

24. The method of claim 23, further including providing a measuring device for measuring the amount of pressurized aseptic product flowing from the tank to the valve.

*10 A* 25. (Amended) The method comprising:

controlling the flow of an aseptic product using a valve; surrounding a region where the aseptic product exits the valve with a sterile region;

controlling the opening or closing of the valve with a sealed actuator, wherein the sealed actuator is surrounded with the sterile region; and

*b* providing a second apparatus wherein <sup>a</sup> ~~the~~ container is filled to a first level with the product exiting from the first apparatus, and the container is filled to a second level with the product exiting from the second apparatus.

~~26. b~~ 26. <sup>14</sup> A (Amended) ~~The~~ method comprising:

controlling the flow of an aseptic product using a valve;  
surrounding a region where the aseptic product exits the  
valve with a sterile region;

controlling the opening or closing of the valve with a  
sealed actuator, wherein the sealed actuator is surrounded with  
the sterile region;

providing a tank for containing a supply of pressurized  
aseptic product flowing to the valve;

<sup>a 2</sup> providing a measuring device for measuring the amount of  
pressurized aseptic product flowing from the tank to the valve;

exposing the valve, an interior surface of the tank, and an  
interior surface of the measuring device to steam;

covering an exit of the valve; and

allowing a build-up of steam pressure inside the tank to  
above a temperature of about 250°F, a steam pressure of about 50  
psig, for about 30 minutes.

~~27. b~~ 27. <sup>15</sup> A (Amended) ~~The~~ method comprising:

controlling the flow of an aseptic product using a valve;  
surrounding a region where the aseptic product exits the  
valve with a sterile region;

controlling the opening or closing of the valve with a  
sealed actuator, wherein the sealed actuator is surrounded with

the sterile region;

providing a tank for containing a supply of pressurized aseptic product flowing to the valve;

providing a measuring device for measuring the amount of pressurized aseptic product flowing from the tank to the valve;

exposing the valve, an interior surface of the tank, and an interior surface of the measuring device to steam;

*a2*  
covering an exit of the valve;

allowing a build-up of steam pressure inside the tank to above a temperature of about 250°F, a steam pressure of about 50 psig, for about 30 minutes;

uncovering the exit of the valve; and

providing sterile air to reduce the temperature of the valve, the interior surface of the tank, and the interior surface of the measuring device to the temperature of the product.

*a3*  
37. (Amended) A method comprising:

controlling the flow of an aseptic product through a nozzle using a valve;

surrounding a region where the aseptic product exits the valve with a sterile region wherein the sterile region is a sterile tunnel; and

displacing the valve with an electromagnetic actuator, wherein an electrical current applied to the electromagnetic

actuator displaces the valve into an open position allowing the aseptic product to flow through an outlet port of the nozzle.

~~D~~ 38. 19

(Amended) ~~A~~ The method comprising:

controlling the flow of an aseptic product through a nozzle using a valve wherein an outer surface of the valve includes indentations for forming aseptic product flow passages between an inner wall of the nozzle and the outer surface of the valve for transporting the aseptic product to the outlet port of the nozzle;

surrounding a region where the aseptic product exits the valve with a sterile region; and

displacing the valve with an electromagnetic actuator, wherein an electrical current applied to the electromagnetic actuator displaces the valve into an open position allowing the aseptic product to flow through an outlet port of the nozzle.

39. The method of claim 37, further including providing a pressurized aseptic product into the nozzle.

40. The method of claim 39, further including comprising:

removing the electric current to the electromagnet actuator allowing the valve to be displaced by the pressurized aseptic

product into a closed position sealing the outlet port of the nozzle.

4. (NEW) The method of claim ~~22~~, further wherein the sealed actuator is partially within the sterile tunnel.

5. (NEW) The method of claim ~~22~~, further wherein the sealed actuator is fully within the sterile tunnel.

6. (NEW) The method of claim ~~22~~, further wherein the sealed actuator is attached to a wall of the sterile tunnel.

7. (NEW) The method of claim ~~22~~, further including:  
connecting the sealed actuator to a control system with a control conduit.

8. (NEW) The method of claim ~~4~~, wherein a penetration of the control conduit through a wall of the sterile tunnel is a sealed member.

10. (NEW) The method of claim ~~22~~, wherein the container is filled to a first level of at least about 100 containers per minute.

~~12~~ (NEW) The method of claim ~~46~~, wherein the container is filled to a second level of at least about 100 containers per minute.

~~13~~ (NEW) The method of claim ~~22~~, further comprising:  
aseptically disinfecting ~~the~~<sup>9</sup> plurality of bottles to a level producing at least about a 6 log reduction in spore organisms.

~~14~~ (NEW) The method of claim ~~25~~, wherein the aseptic product has been sterilized to a level producing at least about a 12 log reduction in *Clostridium botulinum*.

~~15~~ (NEW) A method comprising:  
aseptically disinfecting a plurality of containers in a sterile tunnel;  
controlling the flow of an aseptic product into the plurality of containers using a valve;  
surrounding a region where the aseptic product exits the valve with a sterile region wherein the sterile region is the sterile tunnel; and  
controlling the opening or closing of the valve with a sealed actuator, wherein the sealed actuator is surrounded with the sterile region.

~~16~~ (NEW) The method of claim ~~50~~, wherein the aseptically

disinfecting is to a level producing at least about a 6 log reduction in spore organisms.

~~52.~~ (NEW) The method of claim ~~50~~, wherein the aseptic product has been sterilized to a level producing at least about a 12 log reduction in *Clostridium botulinum*.

~~53.~~ (NEW) The method of claim ~~50~~, wherein the plurality of containers are filled at least about 100 containers per minute.

~~54.~~ (NEW) The method comprising:

controlling the flow of an aseptic product using a valve; surrounding a region where the aseptic product exits the valve with a sterile region;

controlling the opening or closing of the valve with a sealed actuator, wherein the sealed actuator is surrounded with the sterile region; and

providing a second apparatus wherein an aseptically disinfected container is filled to a first level with the product exiting from ~~the~~<sup>9</sup> first apparatus, and the container is filled to a second level with the product exiting from the second apparatus, wherein the exiting of the aseptic product and the aseptic disinfecting of the container occur in the same sterile region.

*25*  
56. (NEW) The method of claim *54*, wherein the aseptically disinfecting is to a level producing at least about a 6 log reduction in spore organisms.

*26*  
56. (NEW) The method of claim *54*, wherein the aseptic product has been sterilized to a level producing at least about a 12 log reduction in *Clostridium botulinum*.

*A4* *27*  
57. (NEW) The method of claim *54*, wherein ~~the~~<sup>9</sup> plurality of containers are filled at least about 100 containers per minute.

*start by* *28*  
58. (NEW) The method comprising:  
controlling the flow of an aseptic product using a valve;  
filling an aseptically disinfected container with the aseptic product;  
surrounding a region where the aseptic product exits the valve with a sterile region, wherein the exiting of the aseptic product and ~~the~~ aseptic disinfecting of the container occur in the sterile region;

*start b*  
controlling the opening or closing of the valve with a sealed actuator, wherein the sealed actuator is surrounded with the sterile region;

providing a tank for containing a supply of pressurized aseptic product flowing to the valve;

providing a measuring device for measuring the amount of pressurized aseptic product flowing from the tank to the valve; exposing the valve, an interior surface of the tank, and an interior surface of the measuring device to steam; covering an exit of the valve; and allowing a build-up of steam pressure inside the tank to above a temperature of about 250°F, a steam pressure of about 50 psig, for about 30 minutes.

- al* 29  
59. (NEW) The method of claim 58, wherein the aseptically disinfecting is to a level producing at least about a 6 log reduction in spore organisms.
- 30* 28  
60. (NEW) The method of claim 58, wherein the aseptic product has been sterilized to a level producing at least about a 12 log reduction in *Clostridium botulinum*.

- Rule 1.126* 31  
~~60.~~ (NEW) The method of claim 58, wherein ~~the~~ containers are filled at least about 100 containers per minute.
- Rule 1.126* 32  
61. (NEW) A method comprising:

controlling the flow of an aseptic product using a valve; filling an aseptically disinfected container with the aseptic product;

surrounding a region where the aseptic product exits the valve with a sterile region, wherein the exiting of the aseptic product and ~~the~~ aseptic disinfecting of the container occur in the sterile region;

controlling the opening or closing of the valve with a sealed actuator, wherein the sealed actuator is surrounded with the sterile region;

providing a tank for containing a supply of pressurized aseptic product flowing to the valve;

providing a measuring device for measuring the amount of pressurized aseptic product flowing from the tank to the valve;

exposing the valve, an interior surface of the tank, and an interior surface of the measuring device to steam;

covering an exit of the valve;

allowing a build-up of steam pressure inside the tank to above a temperature of about 250°F, a steam pressure of about 50 psig, for about 30 minutes;

uncovering the exit of the valve; and

providing sterile air to reduce the temperature of the valve, the interior surface of the tank, and the interior surface of the measuring device to the temperature of the product.

*Rule 1.126 (2) 33*  
62. (NEW) method of claim 61, wherein the aseptically disinfecting is to a level producing at least about a 6 log

reduction in spore organisms.

*Rule 1.126  
63. (NEW)*

*61, 62, 32*  
63. (NEW) The method of claim 61, wherein the aseptic product has been sterilized to a level producing at least about a 12 log reduction in *Clostridium botulinum*.

*64  
Rule 1.126  
64, 65, 35*

*62, 32*  
64. (NEW) The method of claim 61, wherein ~~the~~ containers are filled at least about 100 containers per minute.

#### **REMARKS**

The Applicant respectfully request entry of the above amendments and reconsideration in view of the amendments and the following remarks.

Claims 1-40 were presented for prosecution. Claims 1-21 and 28-36 were withdrawn from consideration. Claims 41 - 64 are hereby added.

The Examiner objected to Claims 25-27 and 38. Said Claims were amended to independent form, per the Examiner's request, in order to place the claims in condition for allowance.

The Examiner rejected Claims 22, 23, 37, 39 and 40 under 35 U.S.C. §102(b) as being anticipated by Reichert (USPN 3,604,480). Further, the Examiner rejected Claim 24 under 35 U.S.C. §103(a) as being unpatentable over Reichert in view of Jorss (USPN